

# Suicide at Christmas

Report by Simon Carley, *Consultant*

Checked by Mark Hamilton, *Emergency Physician*

doi: 10.1136/emj.2004.019703

## Abstract

A short cut review was carried out to establish whether the risk of suicide and parasuicide increases at Christmas. Fifteen papers were found using the reported search, of which six presented the best evidence to answer the clinical question. The author, date and country of publication, patient group

studied, study type, relevant outcomes, results and study weaknesses of these best papers are tabulated. A clinical bottom line is stated.

## Clinical scenario

You are planning for winter pressures in your emergency department. You wonder if you will need additional psychiatric support over the Christmas period to cope with a perceived increase in the number of suicide attempts. When you bring this up at a senior team meeting a colleague suggests that in fact the number of suicides decreases over the Christmas period. You wonder if this is true.

Table 6

Author, date and country	Patient group	Study type (level of evidence)	Outcomes	Key results	Study weaknesses
Phillips SP and Wills JS, 1987, US	Suicides in the US from 1973–1979. 188,047 suicides included in database	Retrospective database analysis	Rates at Christmas	Fewer (up to 15%) suicides before Christmas ( $p < 0.05$ )	
Masterton G, 1991, UK	All parasuicide admissions between January 1969 and December 1987 involving people in Edinburgh. Aged $>16$ . 22169 admissions were included	Retrospective database analysis	Parasuicide incidence at Christmas in women  Parasuicide incidence at Christmas in men	About 20% decrease in rates for the 4 weeks from 4 Dec until 1 Jan. This was followed by an 11% increase in the first week of the New Year. (comparisons made with average rate over year) No statistical difference over the Christmas period.	Only one centre. Only admitted patients. Long time span of study may result in a number of confounding factors (for example, need for admission)
Cullum SJ <i>et al</i> , 1993, UK	Cases of deliberate self harm presenting to three EDs in London. Rates on Christmas day were compared with rates on 7 Feb and 15 Aug	Retrospective database analysis	Total cases on Christmas day over 7 years Total cases on 7 Feb  Total cases on 15 Aug	12 cases 25 cases 25 cases	Although a statistical difference was found ( $p < 0.05$ ) these are still small numbers. There is no account for the effect on incidence on days before and after Christmas as seen in other papers
Jessen G and Jensen BF, 1999, Denmark	Database of suicides between 1970 and 1994. 32291 suicides included	Retrospective database analysis	Incidence of suicide at Christmas Lowest rate of suicide  Overall rate in December	Decreased in week around Christmas 30% less than expected on Christmas Eve. 20% less than expected on Christmas day 6% less than expected	
Jessen G <i>et al</i> , 1999, Multicentre WHO study	24388 suicide attempts in patients over 15 years between 1989–1996. Data from 13 European centres. Holidays around Christmas and New Year (20 Dec to 6 Jan)	Cohort	Before Christmas  After Christmas  General fluctuation	Statistically fewer attempts on the 20, 21, and 23 Dec Statistically more than expected on the 27 Dec (39% increase) and on New Year's day There was a greater degree of fluctuation around all public holidays	Data collection may suffer during public holidays. This study only examined suicide attempts rather than deaths that reached health service care
Ajdacic-Gross V <i>et al</i> , 2003, Switzerland	Swiss mortality data from 1969–1994. 37158 suicides included in database	Retrospective database analysis	Suicide rates in December  Dates with lowest rates of suicide	10% less than average for year  23, 25, and 30 Dec	

**Three part question**

[In patients at risk of suicide/parasuicide] is [Christmas] a [high risk period]?

**Search strategy**

Medline(R) In-Process, Other Non-Indexed Citations, Medline 1966-07/2004 using the Ovid interface. [christmas.mp] AND [suicide.mp OR exp suicide OR exp suicide, attempted OR parasuicide.mp].

**Search outcome**

Altogether 15 papers were found of which six were relevant to the clinical question. These papers are shown in table 6.

**Comment(s)**

Although the papers presented show a mix of suicide and parasuicide statistics it is apparent that there is a general trend for such events to reduce in December and in particular around the days preceding Christmas day. As with all studies in this area there may be difficulties in gauging the true

incidence as a result of under reporting. This is unlikely to be significantly different at Christmas so overall trends should be valid. The perception of many is that rates go up around Christmas. This has resulted in a greater awareness and access to services at this time. It is an interesting question to ponder whether the reductions seen here are attributable to an overall reduction in need, or the effectiveness of available help services.

**► CLINICAL BOTTOM LINE**

Suicide and parasuicide rates go down around Christmas.

**Phillips DP**, Wills JS. A drop in suicides around major national holidays. *Suicide Life Threat Behav* 1987;**17**:1–12.

**Masterton G**. Monthly and seasonal variation in parasuicide: a sex difference. *Br J Psychiatry* 1999;**158**:155–7.

**Cullum SJ**, Catalan J, Berelowitz K, *et al*. Deliberate self-harm and public holidays: Is there a link? *Crisis* 1993;**14**:39–42.

**Jessen G**, Jensen BF. Postponed suicide death? Suicide around birthdays and major public holidays. *Suicide Life Threat Behav* 1999;**29**:272–82.

**Jessen G**, Jensen BF, Arensman E, *et al*. Attempted suicide and major public holidays in Europe: findings from the WHO/EURO Multicentre study on parasuicide. *Acta Psychiatr Scand* 1999;**99**:412–18.

**Ajdacic-Gross V**, Wang J, Bopp M, *et al*. Are seasonalities in suicide dependent on suicide methods? A reappraisal. *Soc Sci Med* 2003;**57**:1173–81.

## VOLUME 21 REVIEWERS .....

**T**he journal would not function without the time and effort given by our reviewers. The editorial team are immensely grateful for the enormous amount of work and thought given to reviews. We publish this list of our most active reviewers over the past year, a full list would be too long to print!

Thanks to all who review for the *EMJ*, you are the unsung heroes of the journal and we hope we can count on your continued support in the future.

John Sloan  
J M Butler  
Bill Bailey  
Ian Swann  
Carole M Gavin  
Steve Goodacre  
Thomas Clarke  
Simon F J Clarke  
Simon Carley  
Sharon Blanckley  
Christopher Brookes  
Chris Maimaris  
Suzanne M Mason  
Steve Meek

Michael Johnston  
Jane Brenchley  
Andrew M Bentley  
Bernard A Foëx  
Anne E Frampton  
David Watson  
Timothy J Coats  
Cliff John Mann  
John A Henry  
Peter Goode  
David Alao  
Steven Crane  
Richard G Bogle